



## **DoD Global Influenza and Other Respiratory Viral Pathogens Week 13 (27 Mar – 2 Apr) Weekly Surveillance Report**



### **NEW ISOLATES COLLECTED IN WEEK 13: 3 Influenza A, 5 Influenza B**

In addition, 8 influenza A and 3 influenza B isolates were newly identified during Week 13, but were collected prior to that week. For results from individual bases, click [here](#).

### **SUMMARY:**

#### **Overall Results**

Since **3 October 2004**, the Epidemiological Surveillance Division (AFIOH/SDE) has processed 2622 specimens as part of the influenza surveillance program. Of those specimens, 719 (28%) were positive for influenza A, and 151 (6%) were positive for influenza B. In addition, 63 specimens are still being processed. Click [here](#) for a graph of influenza positives (number and percentage) by week.

For a table of specimens submitted by individual sentinel sites, click [here](#).

Besides influenza A and B, the AFIOH lab also tests specimens for adenovirus, HSV, RSV, enterovirus, and parainfluenza pathogens. In the current week's samples, only influenza A and B were found. For viral results by week, click [here](#). Viral results are also broken down by [MAJCOM](#); counts include specimens collected prior to the current week.

#### **Subtyping**

Since **3 October 2004**, we have [subtyped](#) 498 isolates using either polymerase chain reaction (PCR) or hemagglutination-inhibition (HI): 401 are Influenza A/H3N2, 16 are Influenza B/Hong Kong, and 81 are Influenza B/Shanghai.

#### **Age/Military Status**

Overall, Influenza A seems to be dominating all [age](#) and [military status](#) categories in this flu season.

#### **Influenza-like Illness (ILI) Rates**

According to ESSENCE, [ILI rates](#) this week....

#### **Locations**

- Click the following links for cumulative influenza results by sentinel site: [CONUS](#), [OCONUS](#)
- Results for individual bases and CDC regions can be found on the AFIOH Influenza Surveillance website: <https://gumbo.brooks.af.mil/pestilence/Influenza/>

**COMMENTS ON CURRENT TRENDS:** Influenza activity continues to decrease steadily among sentinel sites, and the CDC is reporting a continued decrease in activity as well. European countries are reporting declining or baseline levels of activity. Japan reports similar decreasing trends. There continues to be a relatively larger proportion of influenza B isolates later in the season, both from CONUS and overseas sites; this trend has also been noted in Europe, Canada, and Japan. Notably, the B isolates have been subtyped as Shanghai, so the question of vaccine mismatch is less of a concern. All recent influenza A isolates have been sequenced as similar to the California strain, as per our molecular laboratory at AFIOH.

There have been news reports of avian influenza outbreaks in North Korean chicken flocks; recent tests, unconfirmed by WHO, have reported the subtype to be H7. DoD-GEIS is monitoring the status of U.S. bases in South Korea; to date, there is no indication that U.S. personnel in South Korea have been affected. Respiratory counts on ESSENCE and specimen submissions to AFIOH from South Korean sites have remained low. There has been a recent elevation of respiratory disease at Camp Walker, but any connection to avian influenza is highly unlikely as it is far from the North Korean border.

ILI rates for the whole Pacific Rim region (taken from ESSENCE) do show a delayed decrease compared to other regions of the world, mostly due to sites in Japan. ILI rates at South Korean sites have stayed low; ILI rates in Japan are decreasing though still elevated, particularly Kadena AB. Public Health at Kadena reports that doctors there believe ILI is likely caused by adenovirus or other respiratory viral diseases aside from influenza. They will try to send samples to us to verify.

## **NATIONAL INFLUENZA ACTIVITY: CDC**

<http://www.cdc.gov/ncidod/diseases/flu/weeklychoice.htm>

During week 12 (the latest report available), CDC reported continued decreasing influenza activity; the flu epidemic this year seems to have peaked in February. Laboratory surveillance identified 233 specimens (13.1%) positive for influenza. Of these, 30 were influenza A (H3N2), 56 were influenza A viruses that were not subtyped, and 147 were influenza B. Four states reported widespread influenza activity; 15 states reported regional activity; 20 states, the District of Columbia, and New York City reported local activity; and 10 states reported sporadic activity.

## **INTERNATIONAL INFLUENZA ACTIVITY: WHO**

<http://www.who.int/GlobalAtlas/DataQuery/home.asp>

Week in review: **Weeks 12-13**

*South America:* Brazil reported sporadic activity.

*Asia:* China, Israel, and Thailand reported sporadic activity.

*Europe:* Belarus, France, Greece, Poland, Portugal, and Spain reported sporadic activity. Finland reported a local outbreak. Belgium, Denmark, Italy, Romania, and Switzerland reported regional outbreaks. Latvia, the Russian Federation, Sweden, and Ukraine reported widespread outbreaks.

*North America:* The United States reported sporadic activity.

*Africa:* Tunisia reported sporadic activity.

**Note:** WHO review has been expanded to the previous 2 weeks in order to capture delayed reports from countries.

## **ADDITIONAL INFORMATION:**

### **Avian Influenza Update\*:**

Five new cases of influenza H5N1 have been confirmed in Viet Nam; victims are from a single family living in the northern city of Haiphong. The family was hospitalized on 22 March and remains in care. Since mid-December, a total of 33 avian flu cases have been reported in Viet Nam; 15 of these were fatal.

\*As reported by WHO on 4 April 2005. For a full report, please see:

[http://www.who.int/csr/don/2005\\_04\\_04/en/](http://www.who.int/csr/don/2005_04_04/en/)

**Influenza-Associated Pediatric Deaths:** During week 12, two pediatric deaths were reported to the CDC. During the current season, the CDC has reported 24 pediatric deaths related to influenza infection from 12 states: California, Colorado, Georgia, Iowa, Maine, Massachusetts, Mississippi, New Jersey, New York, Ohio, Pennsylvania, and Vermont.

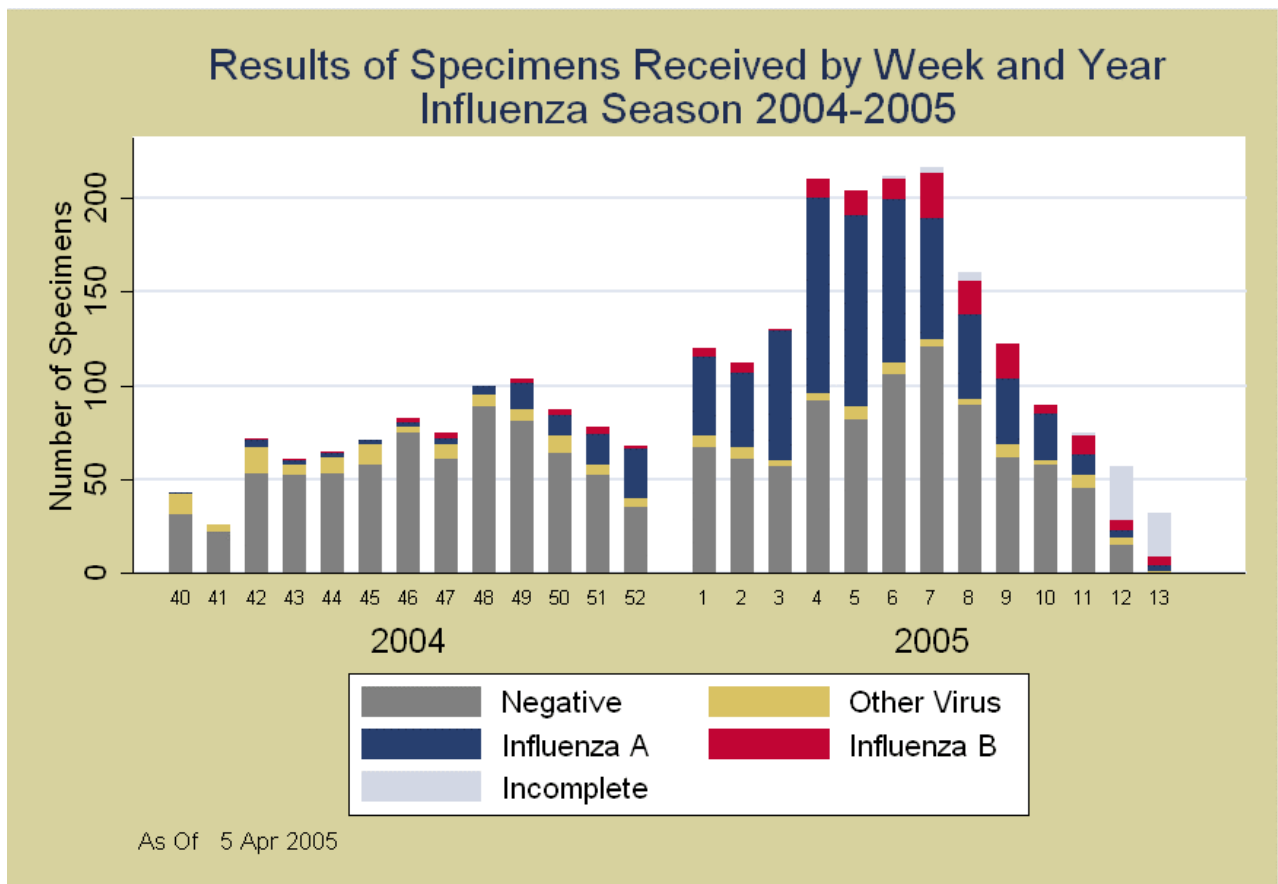
Please direct any questions or comments to: [influenza@brooks.af.mil](mailto:influenza@brooks.af.mil)

**Table 1: Newly Identified Influenza Specimens this Week, by Base**

Site Name	Influenza A		Influenza B	
	New*	Old**	New*	Old**
Laughlin, TX	1			
McGuire AFB, NJ	1	1	1	
NAB Little Creek, VA		1	2	
Scott AFB, IL		1		2
USAF Academy, CO			1	
Al Udeid AB, Qatar		1		
Incirlik AB, Turkey		1		
RAF Lakenheath, UK	1	2		
Yokota AFB, Japan		1	2	

\*New: newly identified and collected during current week

\*\*Old: newly identified, but collected prior to current week

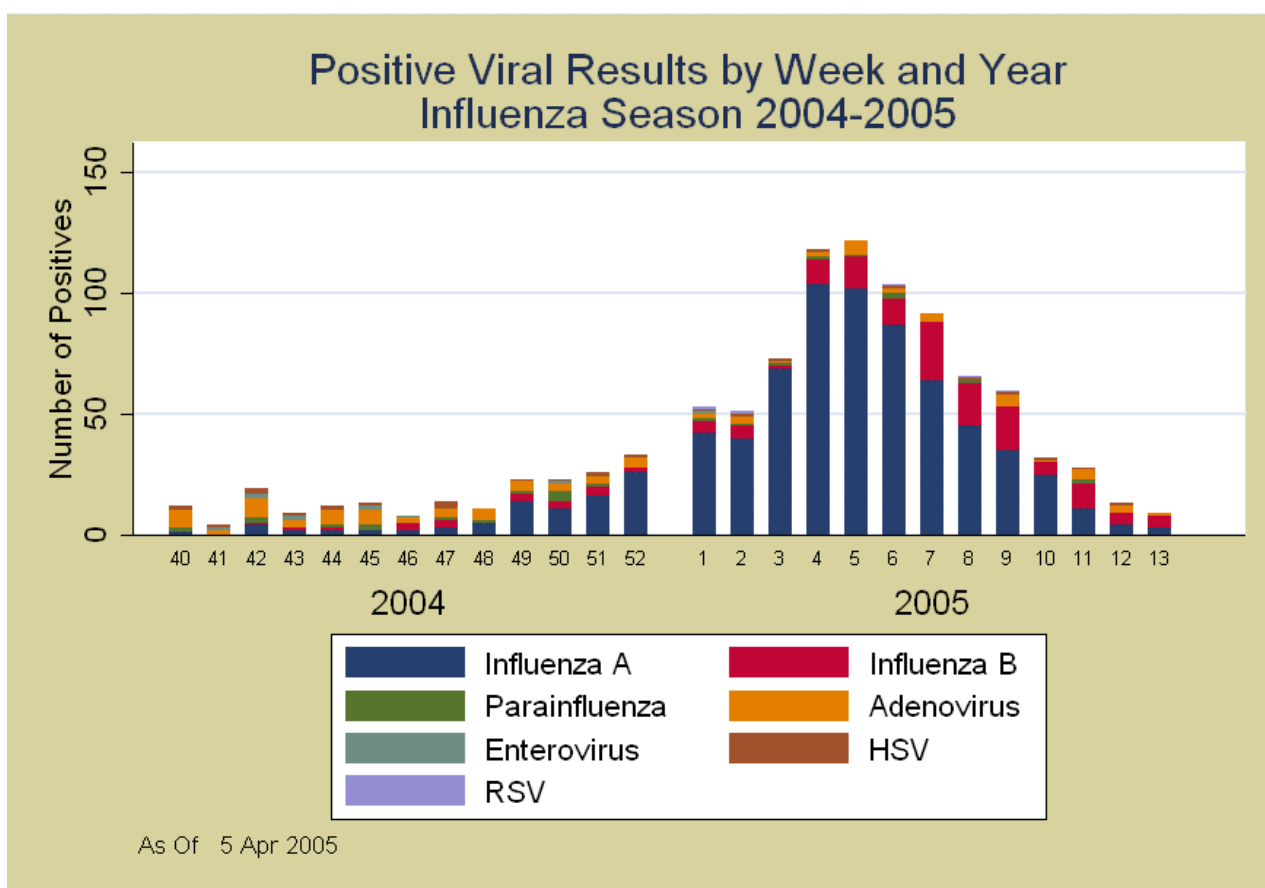


**Tables 2 and 3: Respiratory Specimens Submitted by Sentinel Sites, and by Overseas Laboratories since October 3, 2004 (including Incomplete Processing)**

<b>AETC</b>	<b>Specimens Submitted</b>
Maxwell AFB, AL	<b>65</b>
Sheppard AFB, TX	<b>220</b>
<b>AMC</b>	<b>Specimens Submitted</b>
Andrews AFB, MD	<b>10</b>
Travis AFB, CA	<b>25</b>
McGuire AFB, NJ	<b>115</b>
Scott AFB, IL	<b>391</b>
<b>CENTCOM</b>	<b>Specimens Submitted</b>
Ganci AB, Kyrg	<b>0</b>
Al Udeid AB, Qatar	<b>10</b>
Balad AB, Iraq	<b>25</b>
<b>PACAF</b>	<b>Specimens Submitted</b>
Hickam AFB/NS Pearl Harbor, HI	<b>0</b>
Kadena AB, Japan	<b>1</b>
Kunsan AB, Korea	<b>9</b>
Andersen AFB, Guam	<b>13</b>
Yokota AB, Japan	<b>55</b>
Misawa AB, Japan	<b>51</b>
Osan AB, Korea	<b>30</b>
Elmendorf AFB, AK	<b>47</b>
<b>USAFA</b>	<b>Specimens Submitted</b>
US Air Force Academy, CO	<b>61</b>

<b>USAFE</b>	<b>Specimens Submitted</b>
Incirlik AB, Turkey	<b>21</b>
Aviano AB, Italy	<b>42</b>
Ramstein AB, Germany	<b>73</b>
RAF Lakenheath, UK	<b>273</b>
<b>ARMY</b>	<b>Specimens Submitted</b>
Landstuhl RMC, Germany	<b>47</b>
Tripler AMC, HI	<b>43</b>
<b>COAST GUARD</b>	<b>Specimens Submitted</b>
CGS Ketchikan, AK	<b>0</b>
<b>NAVY</b>	<b>Specimens Submitted</b>
NMC San Diego, CA	<b>5</b>
NH Yokosuka, Japan	<b>31</b>
Bremerton NS, WA	<b>13</b>
NAB Little Creek, VA	<b>77</b>
<b><i>TOTAL for SENTINEL SITES</i></b>	<b><i>1753</i></b>

<b>OVERSEAS LAB</b>	<b>Specimens Submitted</b>
AFRIMS, Thailand	<b>0</b>
AFRIMS, Nepal	<b>0</b>
Nicaragua	<b>0</b>
NMRC-D, Peru	<b>363</b>
<b><i>TOTAL for OVERSEAS LABS</i></b>	<b><i>363</i></b>



**Note:** Graphs do not include data from the NHRC, which conducts Febrile Respiratory Illness (FRI) surveillance among recruit populations. NHRC compiles this data into a separate report. For more information, visit the NHRC website at <http://www.nhrc.navy.mil/geis/>

**Table 4. Summary of Recently Processed Specimens from All Sites**

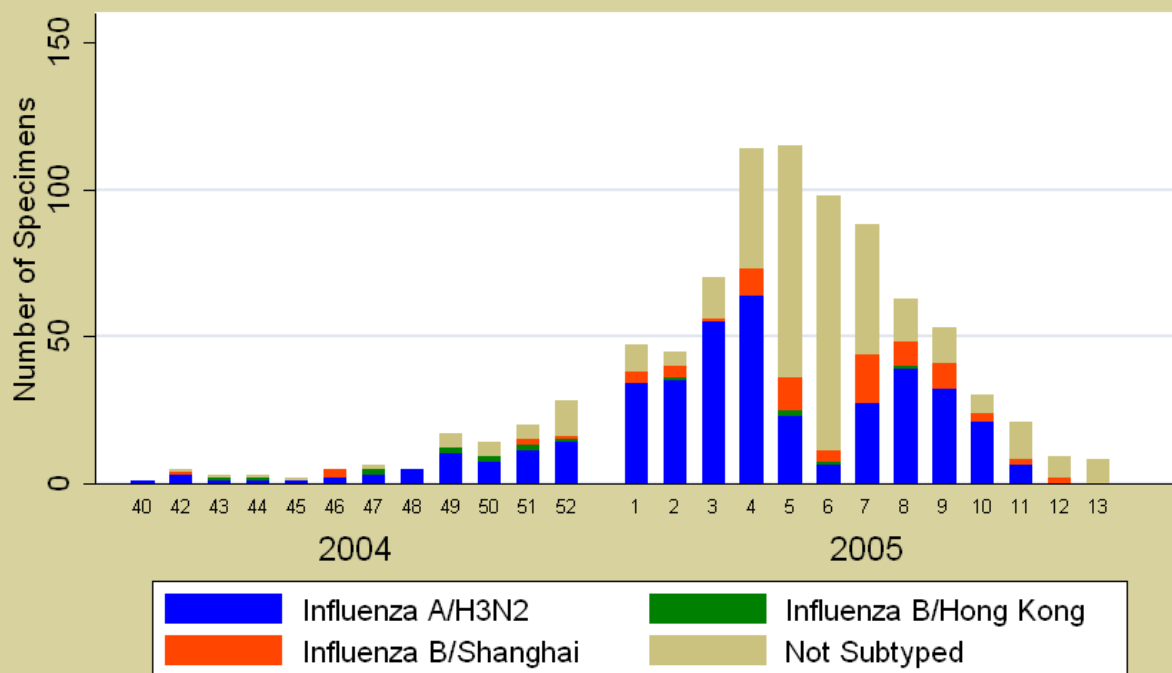
This table includes specimens collected prior to the current week, so results may not match the above graph.

Location	Results of Specimens Processed during current week*				
	Negative	Influenza A	Influenza B	Adenovirus	Other
<b>TOTAL</b>	<b>62</b>	<b>48</b>	<b>35</b>	<b>5</b>	<b>1**</b>
<b>NORTH AMERICA</b>	33	26	9	3	0
<b>PACOM</b>	16	6	15	1	1
<b>EUCOM</b>	9	9	4	1	0
<b>CENTCOM</b>	4	2	0	0	0
<b>SOUTH AMERICA</b>	0	5	7	0	0

Comments: \* Influenza A and B totals include recent subtyping results.

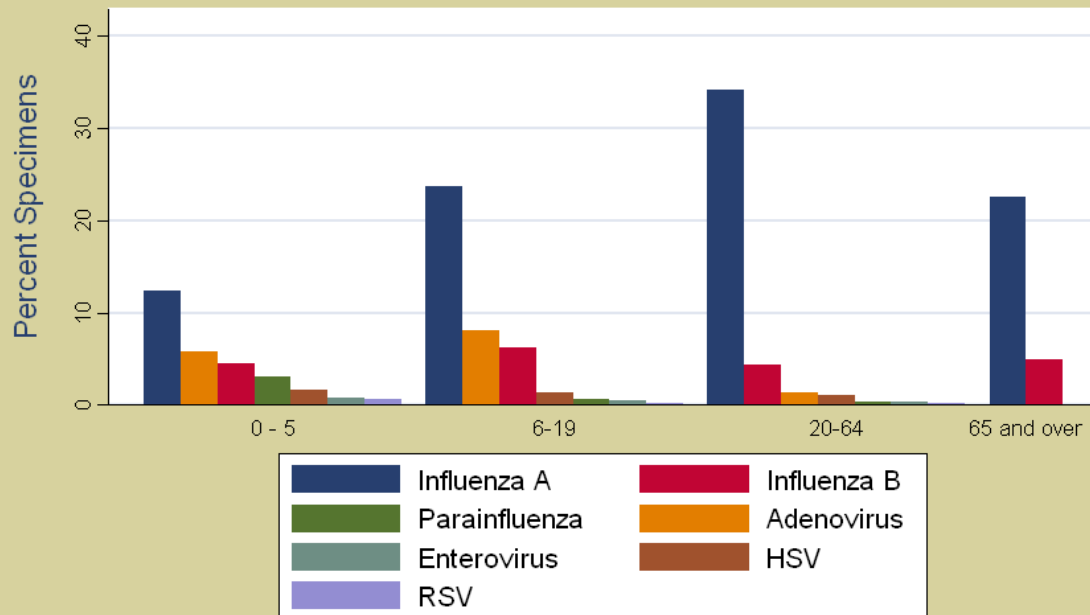
\*\*1 HSV

## Subtyping Results by Week and Year Influenza Season 2004-2005



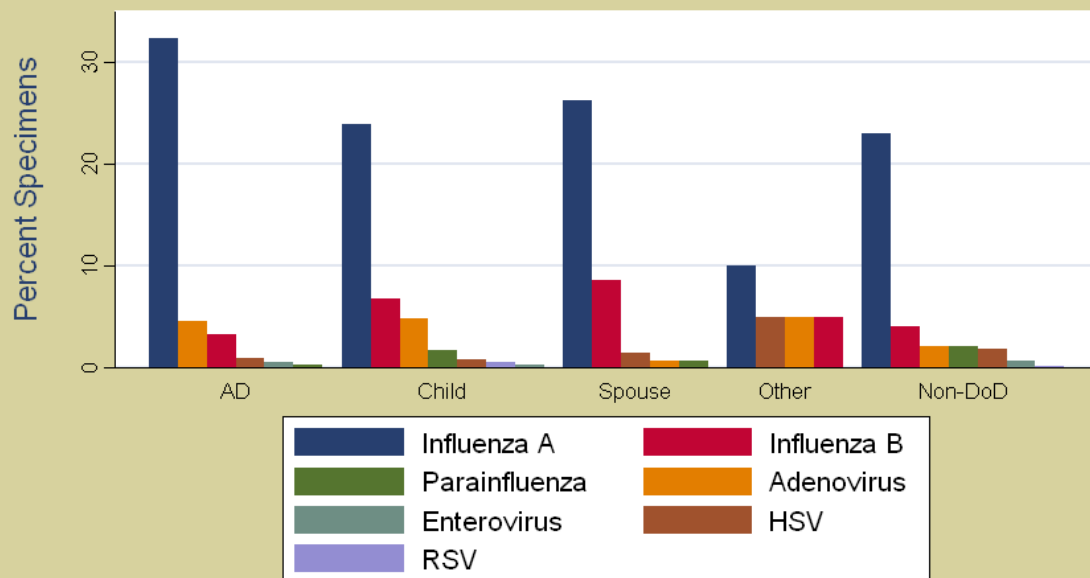
As Of 5 Apr 2005

## Percent of Respiratory Virus Submissions by Age Group Influenza Season 2004-2005



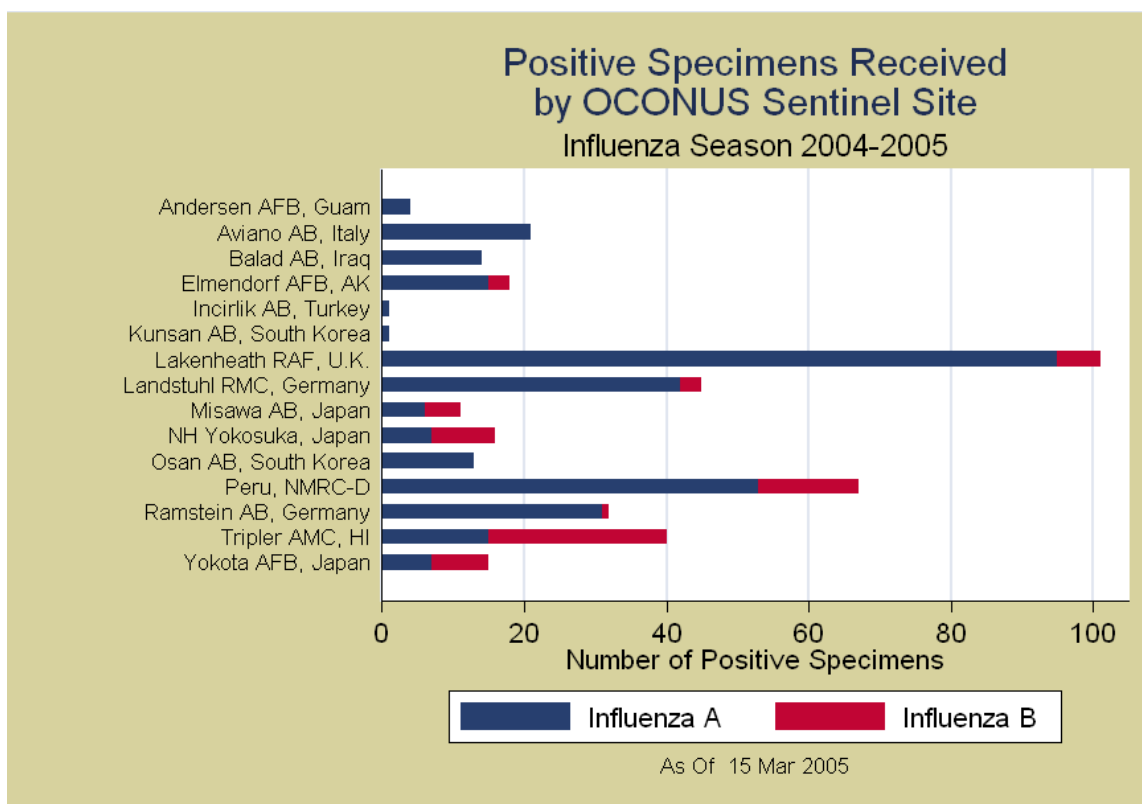
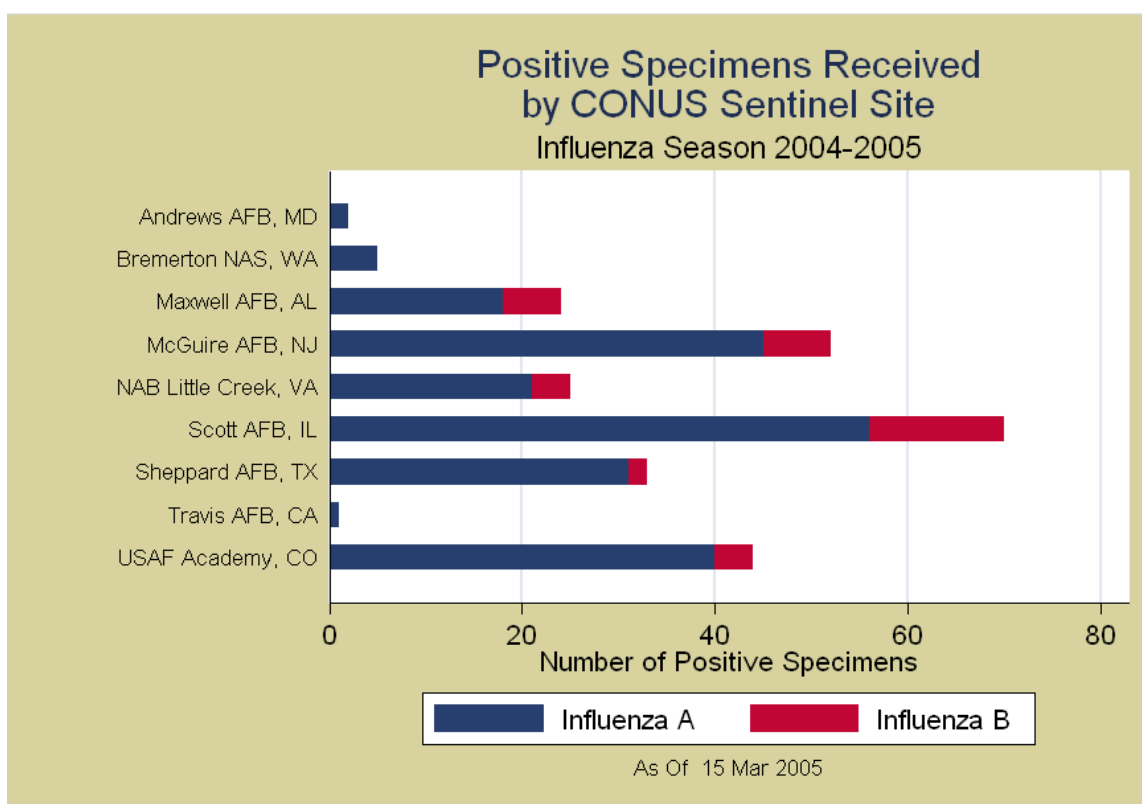
As of 15 Mar 2005

## Percent of Respiratory Virus Submissions by Family Military Prefix Influenza Season 2004-2005



As of 15 Mar 2005

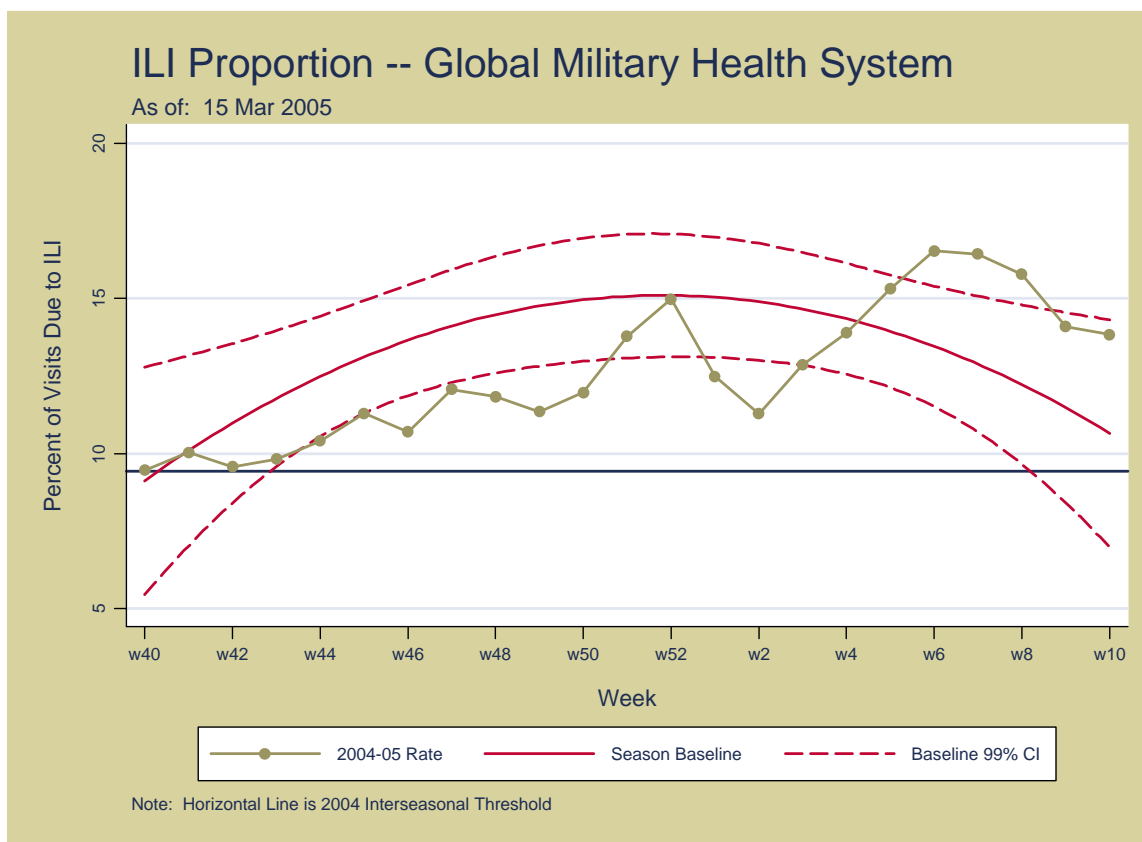




Numbers and graphs for individual bases can be found on the AFIOH Influenza Surveillance website:  
<https://gumbo.brooks.af.mil/pestilence/Influenza/>

## INFLUENZA-LIKE ILLNESS:

This graph plots the percentage of weekly outpatient visits at military installations that had an ICD-9 code correlating with Influenza-Like Illness as defined by ESSENCE. Visit and coding data were taken from ESSENCE. A seasonal baseline and 99% confidence intervals are included for comparison. The baseline was calculated from ESSENCE data for the previous 2 years. Note that the ESSENCE definition for Influenza-Like Illness differs from the CDC definition. See our website for a detailed explanation.



Graphs for individual bases and regions can be found on the AFIOH Influenza Surveillance website:  
<https://gumbo.brooks.af.mil/pestilence/Influenza/ILChartsform.cfm>